

Erythropoietin (EPO)

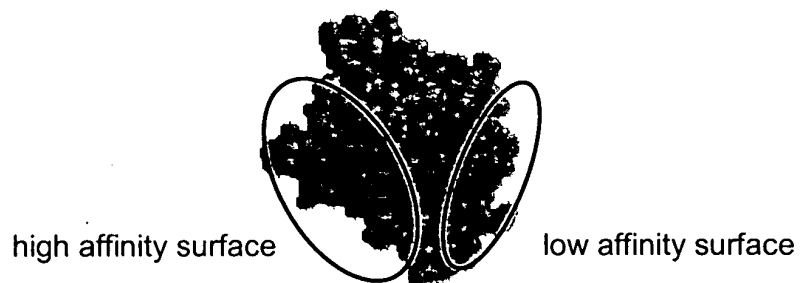


Fig. 2

The initial event is the association of the high affinity surface of an EPO molecule with the hormone binding pocket on an EPOR.

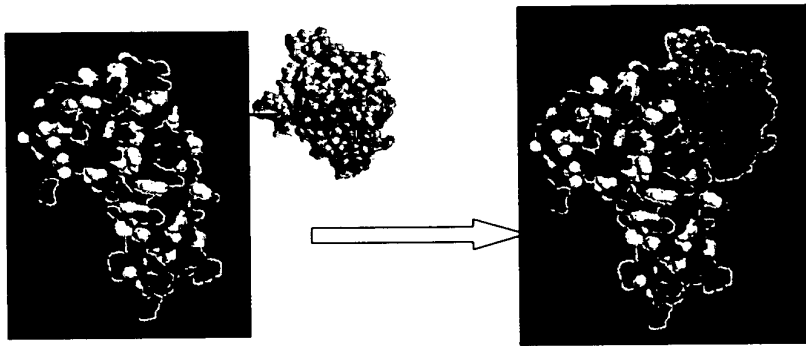


Fig. 3

The EPORs are anchored in the membrane, they can only diffuse laterally or rotate in the plane of the membrane.

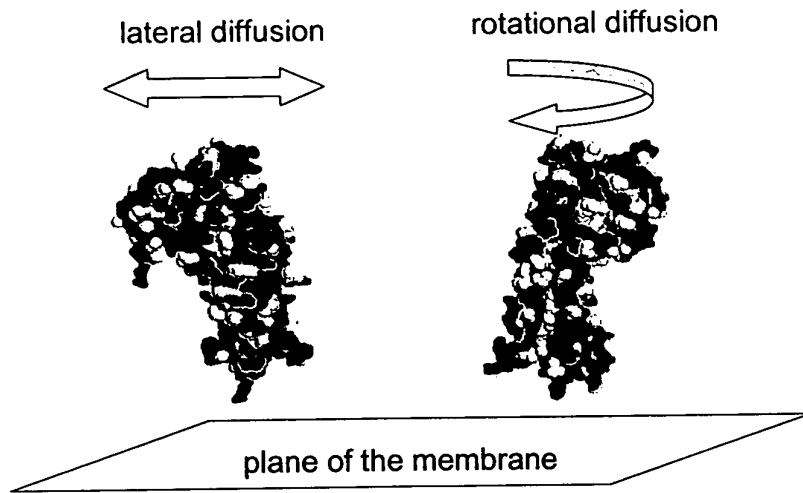


Fig. 4

Once the high affinity EPO surface binds to the first EPOR, the low affinity EPO surface is positioned within a narrow two-dimensional plane. Because the unoccupied EPORs can only diffuse laterally or rotate in that narrow plane, they can easily engage low affinity EPO surface, forming the activated complex.

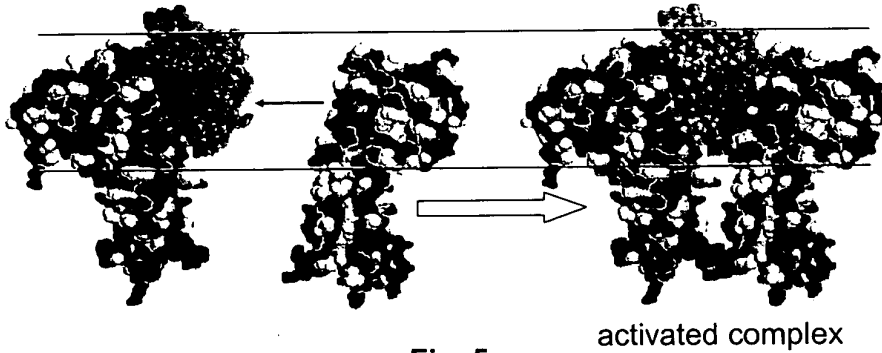


Fig. 5

LZHRs are short helical peptides with one face of the helix composed of the amino acid leucine (grey), which has a hydrophobic (water-avoiding) side chain.

When two LZHRs are in close proximity the two leucine-faces "zip" together (right), to be shielded from water.

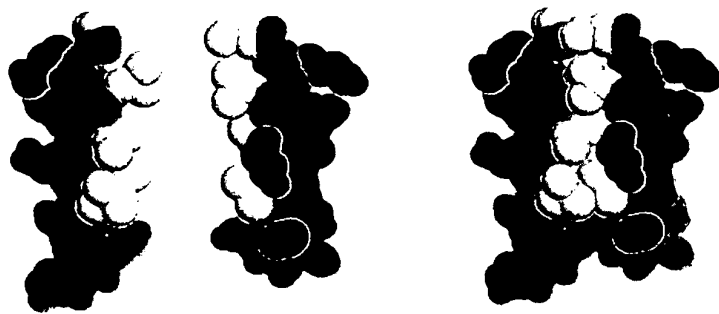


Fig. 6

By attaching a short LZHR to the EPOR by a flexible linker peptide, the formation of the EPOR*-EPO-EPOR* complex can be effectively achieved in a cell-free environment.

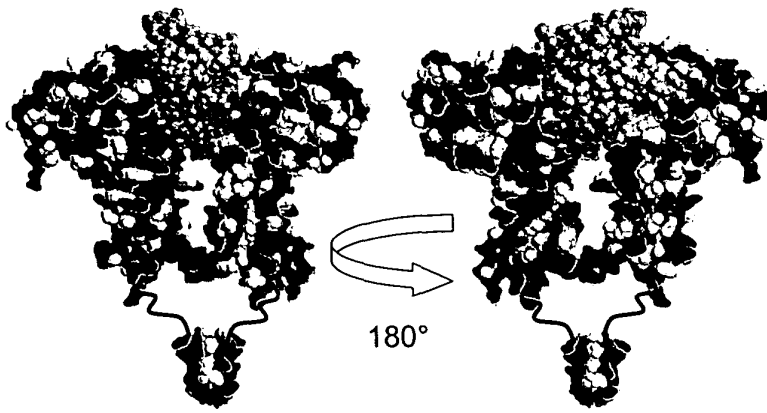


Fig. 7

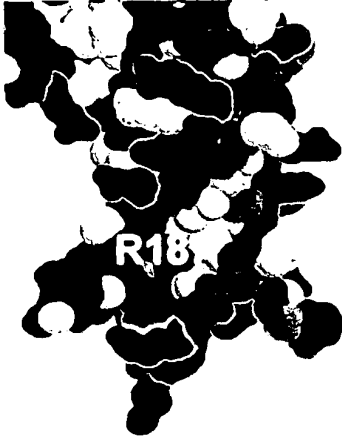


FIGURE 8



FIGURE 9



FIGURE 10



FIGURE 11



FIGURE 12

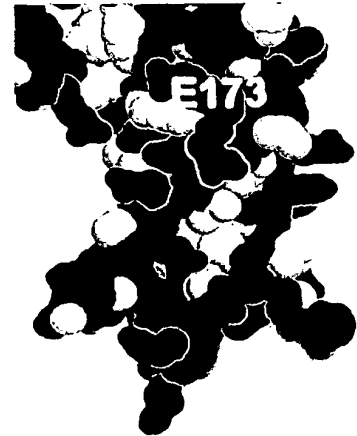


FIGURE 13

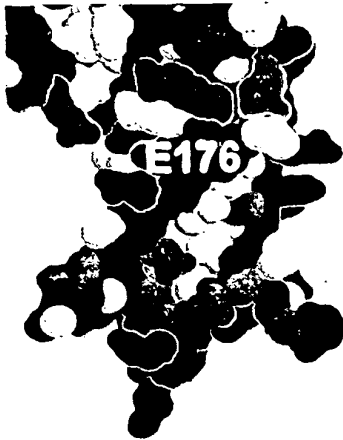


FIGURE 14

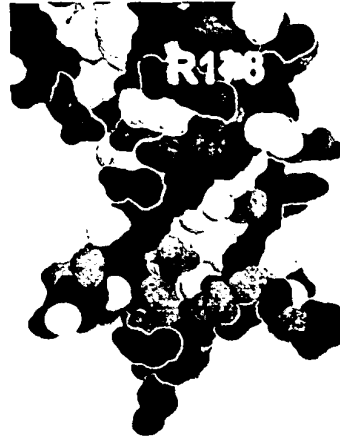


FIGURE 15



FIGURE 16



FIGURE 17